

REMARKS/ARGUMENTS

Claims 5, 18, and 23-37 are pending in the application. Claims 5, 18, and 23-37 were rejected. Applicants have amended Claims 5, 25, and 29. Applicants respectfully request reconsideration and allowance of all pending claims.

Discussion of Rejections Under 35 U.S.C. §102

Claims 5, 23, 25-30 were rejected under 35 U.S.C. §102(e) as being Anticipated by Kliger. The Examiner indicated that Applicants' arguments are not persuasive. The Examiner once again disputes Applicants' contention that Kliger does not teach or suggest using a filter to reflect the signals back through the splitter for transmission to other devices in the network. In order to further clarify the issues, Applicants have amended the claims to recite that the filter is "tuned to **reject** network signals originating in the building, such that the network signals originating in the building do not pass through the filter, but rather are reflected back into the building."

Applicants respectfully point out to the Examiner that a rejection based upon 102(e) requires that the Examiner identify within the cited reference relied upon, each and every element recited in the claims being rejected. In particular, Applicants contend that the Examiner has failed to show that the references cited disclose a filter as recited in independent claims 5, 25, and 29.

Examiner has stated that:

Kliger teaches a signal distribution network comprising: a filter (44 - fig. 2) located at the point of entry of a building tuned to reflect network signals originating in the building back into the building - (HRU 44 is located within demarcation point unit 14 which is located at the point of entry of the building. [0055], [0056]).

The Examiner provides support for this contention in paragraph 2 of the Office Action dated 10/20/08, which has the heading "Response to Arguments". The Examiner contends that "Fig.2 in Kliger illustrates the demarcation point unit 14 which reflects incoming signals from various devices in a home network." However, as noted by Applicant in earlier

responses (and as is made more clear by the currently presented amendments that do not alter the scope of Claim 5 or the other amended claims), the HRU 44, while located within demarcation point unit 14 is located at the point of entry of the building, is not tuned to reject signals that originate in the building. Rather, the HRU 44 of Kliger takes those signals in and loops them back out after processing those signals. The amount of hardware necessary to perform that looping function (as opposed to rejecting the signal, as recited in the currently amended claims) is significantly more than just the filter that is recited in currently presented claims, such as Claim 5. Kliger at paragraph [55] states:

FIG. 2A shows another embodiment of the HRU 44 including a diplexer 42, band pass (BP) filters 46, 48, amplifiers 50, 52, an RF down-converter 54, an RF up-converter 56 and an intermediate frequency filter and amplifier unit 58. (emphasis added).

It should be clear that there is a significant difference between the Kliger looping HRU 44 which requires that the signal be filtered, up and down converted, amplified, filtered again, etc. and the simple structure of the filter tuned to reject signals originating from inside the building. More specifically, Kliger does not teach or suggest a filter tuned to reject signals in order to reflect those signals back to their source. The ultimate end result is the same, that is, to return signals back to the building. However, the structure that is claimed for achieving this end result is completely different from that disclosed by Kliger.

Applicants believe that by rephrasing the language of the claims to recite that the filter is tuned to reject the signals and not to allow the signals to pass that Applicants will more clearly distinguish the claimed invention from Kliger's disclosed HRU 44 which performs the looping function noted above and which the Examiner so eloquently described in the most recent office action. Applicants believe that it should be quite clear in light of the current amendments that it is the particular claimed structure that distinguishes the present claims from Kliger and not the fact that both Kliger and the claimed invention return signals to the building to allow devices within the building to communicate with one another through circuitry provided at the point of demarcation.

Accordingly, Applicants respectfully request that the Examiner reconsider the applicant's contention that the references, neither alone nor in combination, teach nor suggest

all claimed features. Even more particularly, Applicants respectfully still contend that none of the references teach, suggest or motivate one of ordinary skill in the art to make the claimed invention, since none of the cited references teach a filter that rejects network signals and thus reflects those rejected signals back into the building in order to allow terminals coupled to the tap ports (those ports other than the common port) within a network to communicate directly with one another. Nor would it otherwise be obvious to combine elements provided in the prior art in light of the failure of the prior art to provide the missing element of a filter tuned to reject the signals, rather than passing them and looping them back into a splitter.

Note that nothing in Kliger (and more particularly in the discussion of the HRU 44) teaches or suggests that the HRU 44 is (or uses) a filter to reject the signals that are returned to the building. Applicants contend that the failure of the prior art to teach or disclose the use of a filter is due to the effects that were discussed in the previous response, namely the distortion that the use of a filter that reflects the signals would create. It is only by the additional improvements to the signal processing that use of such a filter becomes a consideration, and through the use of these improvements, such as the circuits for doing bitloading and power control, as those terms were discussed and described in Applicants' previous response.

Applicant's once again point out that while the embodiment disclosed in figure 2A teaches the inclusion of two bandpass filters (BPFs) in the HRU 44, those filters are only used for the purpose of separating the high frequencies from the low frequencies. The two BPFs shown in figure 2A clearly do not reject and reflect the signal that is applied to them.

Likewise, independent Claims 25 and 29 have been amended to recite the limitations similar to those limitations discussed above with respect to Claim 5. Thus, Applicants contend that Claims 5, 25 and 29 and those claims that depend therefrom are in condition for allowance.

Discussion of Rejections Under 35 U.S.C. §103

Claims 18, 24, and 36 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kliger as applied to claim 5 above, and further in view of Manssen (5809421).

Claims 29, 30, and 33 were rejected under 35 U.S.C. 103(a) as being unpatentable over Kliger in view of Mukherjee (6226322).

Claim 31 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kliger, and Mukherjee as applied to claim 29 above, and further in view of Kapoor (6,396,886).

Claim 35 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kliger, Mukherjee, and Ise in view of Wu.

Claims 32, 34, and 35, were rejected under 35 U.S.C. 103(a) as being unpatentable over Kliger and Mukherjee as applied to claim 29 above, and further in view of Ise (6,778,601).

Claim 37 was rejected under 35 U.S.C. 103(a) as being unpatentable over Kliger and Mukherjee as applied to claim 29 above, and further in view of Manssen.

It should be noted that while the Examiner has cited several additional references (including: Manssen, Zhang, Ling, Mukherjee, Kapoor, Ise and Wu) in rejecting some of the dependent claims, none of these references teach or suggest the missing element of a filter tuned to reject and reflect signals back into the network from which they were transmitted as described above and recited in the claims as now presented.

Accordingly, Applicants respectfully request reconsideration and allowance of claims 5, 25, 29 and those claims that depend therefrom.

CONCLUSION

Applicants believe that all claims pending in the application are allowable. Applicants therefore respectfully request that a timely Notice of Allowance be issued in this case.

This is a response to the Office Action mailed on 10/20/08, and as such, is submitted timely and no fee is required.

If there are any other fees due in connection with the filing of the response, please charge the fees to our Deposit Account No. 50-4613. If a fee is required for an extension of time under 37 CFR 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned.

Respectfully submitted,

Dated: January 19, 2009

By: /Bruce W. Greenhaus/
Bruce W. Greenhaus
Attorney for Applicants
Registration No. 37,339

Entropic Communications, Inc.
6290 Sequence Drive
San Diego, California 92121
Telephone: (619) 980-2612
e-mail address: bruceg@entropic.com